

Application No. 09/888,727
Reply to Office Action mailed October 8, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of controlling thea flow rate of a fluid sample flowing through a microfluidic channel, the method comprising:

providing a first fluid as a flow in a microfluidic channel; and
sheathing the first fluid sample within a center region of a second fluid
flowing through the microfluidic channel.

wherein:

the second fluid completely surrounds, and is in contact with, the fluid
sample at an interface between the second fluid and the fluid sample;
the flow rate of the fluid sample is constant across the center region; and
the having a known viscosity, such that the first fluid has a flow rate of the
fluid sample that is substantially equal to thea flow rate of the second fluid at the interface
between with the second first fluid and the fluid sample.

2-32. (Cancelled)

33. (New) The method of claim 1, wherein the fluid sample has an unknown or variable viscosity.

34. (New) The method of claim 1, wherein the fluid sample comprises non-dissolved particles.